

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5,
p 92 (USSR) 15-57-5-6320

AUTHORS: Skramtayev, B. G., Royak, S. M., Gershman, M. I.

TITLE: Disintegration of Cements Under Constant and Variable
Attacks (Korroziya tsementov v postoyannykh i peremen-
nykh usloviyakh agressii)

PERIODICAL: V sb: Korroziya betona i mery bor'by s ney, Moscow,
Izd-vo AN SSSR, 1954, pp 128-149.

ABSTRACT: Bibliographic entry

Card 1/1

SKRAMTAEV, B.; KAISER, L.

New type of scaffolding. p. 41. STROITELSTVO. (Ministerstvo na stroezhite)
Vol. 1, no. 2/3, 1954

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 4, No. 12, December 1955

SKRAMTAEV, B.; KAISER, L.

Jack with a lever for putting simplex links together. p. 45. STROITELSTVO
(Ministerstvo na stroezhite) Sofiya. Vol. 1, no. 2/3, 1954

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 4, No. 12, December 1955

SKRAMTAEV, B.; KAISER, L.

Lathe for balusters of Ruse stone. p. 46. STROTELSTVO. (Ministerstvo
na stroezhite) Sofiya. Vol. 1, no. 2/3, 1954

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 4, No. 12, December 1955

SKRAMTAYEV, B., prof., doktor tekhn.nauk

Using coarse porous concrete in constructing walls of farm
buildings. Sel'.stoi. 9 no.6:16-17 S '54.

(MIRA 13:2)

(Concrete blocks) (Farm buildings)

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk.

~~Blocks made of coarse porous concrete for building highway utility~~
buildings. Avt. dor. 17 no.2:17-19 S-O '54. (MIRA 8:4)
(Building blocks)

KRAMTAYE, B.

Chem.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

Dmitrii Stepanovich Belyankin, P. P. Rudnikov, A. S. Berezhnoi, O. K. Bolvinin, S. S. Davydov, Kh. O. Gevor-
kyan, K. E. Goryainov, V. P. Kupriany, I. I. Kitalgorod-
skij, V. G. Kukolev, V. V. Lapin, A. A. Litvakovskij, V. M. Moakvich, S. A. Mironov, O. P. Melchior-Petrosyan, R. L. Pevinski, B. G. Stramtaev, V. N. Yung, and M. M. Vush-
kevich. Zhur. Priklad. Khim. 27, 3-4 (1954).—Obituary with portrait and summary of scientific work in phys. chem-
istry and the silicates. G. M. Kosolapoff

9-2-54
886

SKRAMTAYEV, B. G.

1/11

1854

Technology of Hydrotechnical Concrete (Tekhnologiya gidro-
tekhnicheskogo betona). B. G. SKRAMTAYEV. Gosenergoizdat,
Moscow-Leningrad, 1964. 184 pp., illus. Price R5.20. Re-
viewed in *Tsiment*, 20 [5] 33 (1964).—The book contains 17
reports dealing with the quality of concrete, cement, fillers, and
additions; organization and mechanization of operations; and
pouring in winter. B.Z.K.

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk; KAYSER, I.A.,
~~inzhener.~~

Problem of using fine sands in concrete. Stroi.prom. 32 no.2:
37-41 F '54. (MLRA 7:2)
(Concrete)

SKRAMTAYEV, Boris Grigor'yevich, professor, doktor tekhnicheskikh nauk, laureat Stalinskoy premii; Ivanov, O.M., kandidat tekhnicheskikh nauk, redaktor; ROSTOVTSOVA, M.P., redaktor; TOKER, A.M. tekhnicheskiiy redaktor.

[Coarsely porous concrete and its use in construction] Krupnoporisty i beton i ego primeneniye v stroitel'stve. Moskva, Gos. izd-vo lit-ry po stroitel'stvy i arkhitekture, 1955. 118 p.
(Concrete construction) (MLBA 8:10)

EXHIBIT 78 B.C.

15

/ Fast-setting and hardening high strength cement. B. G. Skramtaev and L. I. Panfilova. *Zhelezno-Dorozh. Stroitel.* 1955, No. 1, 7-9; *Referat. Zhur., Khim.* 1955, Abstr. No. 55828. —The addn. to the Bryansk factory portland cement of the following materials (in wt. %) is investigated: CaCl_2 8, sulfate-alc. waste 0.2, NaCl 8, clay cement 10, and gypsum 5. The CaCl_2 speeds the setting and increases the strength of the concrete the first 3 days. After 7 days the concrete without addns. is stronger. Addn. of the sulfate-alc. waste to the cement mixt. with CaCl_2 slows the setting somewhat, and considerably lowers the concrete strength at any age. The other addns., while speeding up the setting, do not speed up the hardening of the concrete.

N. Vasileff //

3

SKRAMTAYEV, B.G., laureat Stalinskoy premii, doktor tekhnicheskikh nauk,
professor.

Technical problems of rapid-hardening and high strength concrete in
making precast concrete elements. Bet. i zhel.-bet. no.1:24-28 Ap '55.
(Precast concrete) (MIRA 8:9)

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk; BUDILOV, A.A.,
kandidat tekhnicheskikh nauk

New data on the manufacture of rapid-hardening high-strength
concrete varieties made of tough concrete mixtures. Bet. 1
zhel.-bet. no.6:226-227 S '55. (MIRA 8:9)
(Concrete)

SKRAMTAYEV, B. G.

4688

✓ Structure of cement and strength of concrete during prolonged hardening. B. G. SKRAMTAYEV, O. M. ASTREBYA, AND L. YA. LOPATNIKOVA. *Tsiment*, 21 [8] 9-12 (1955).—Portland cement concretes 16 to 17 years old showed about same strength (800 to 778 kg./cm.²). The structure remained gel-like during a prolonged time. Newly formed crystalline products after 16 to 17 years are so small that optical constants and form of the crystals could not be determined. The structure retained fragments of cement clinker amounting to 30 to 40%. These fragments consist of crystals of alite and belite and an intermediate substance. There was no selective hydration of clinker minerals. During prolonged hardening, clinker minerals of slag Portland cement hydrated completely, but the fragments of slag glass did not change. — B.Z.K.

②
PM

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk.

Book reviews: ("Reference book for the worker in building materials laboratories." [professor, doktor tekhnicheskikh nauk, laureat Stalinskoy premii] S.A.Mironov. Reviewed by B.G. Skramtaev). Stroi. prom. 33 no.1:46-48 Ja'55. (MLRA 8:3)
(Building materials)(Mironov, S.A.)

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk; SHUBENKIN, P.F., dotsent, kandidat tekhnicheskikh nauk; BUDILOV, A.A., kandidat tekhnicheskikh nauk.

Methods of obtaining rapid hardening, high-strength concrete. Stroi.
prom. 33 no.2:34-35 F '55. (MIRA 8:4)
(Concrete)

SKRAMTAYEV, Boris Grigor'yevich; ELINZON, Mark Petrovich; BRYZGALOV, N.A.,
redaktor; LYUDKOVSKAYA, N.I., tekhnicheskiiy redaktor

[Lightweight concretes] Legkie betony. Moskva, Gos. izd-vo lit-ry
po stroit. materialam, 1956. 74 p. (MLRA 10:3)
(Lightweight concrete)

MARIYENGOF, Georgiy Dmitriyevich, inzhener; SHUR, Aleksandr Iosifovich,
inzhener; SKRAMTAYEV, B.G., professor, redaktor; KUYBYSHEVA, G.V.,
redaktor; LYUDKOVSKAYA, N.I., tekhnicheskii redaktor

[The production of precast reinforced concrete construction elements
and parts] Proizvodstvo sbornykh zhelezobetonnykh konstruktsii i
detalei. Pod red. B.G.Skramtaeva. Moskva, Gos. izd-vo lit-ry po
stroit. materialam, 1956. 611 p. (MLRA 9:11)
(Precast concrete)

SKRAMTAYEV, I. B.

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62355

Author: Skramtayev, B., Kravchenko, I.

Institution: None

Title: Expanding Gypsum-Alumina Cement

Original

Periodical: Stroit. materialy, izdeliya i konstruktsii, 1956,² No 3, 10-12

Abstract: Description of the results of tests of specimens of gypsum-alumina cement (GAC) up to 5 years old. Strength after 5 years of rigid consistency specimens both tensile and compression are higher than the 3 day old strength ($\sim 340 \text{ kg/cm}^2$) which determines the grade of cement. In contrast with alumina cement strength of GAC is retained at 35-37° almost unchanged for one year. Frost resistance of specimens of plastic consistency of 1:2 composition, by weight, is high (up to 250 cycles) and does not depend on magnitude of linear expansion (0.14-0.37%). Specimens of concrete withstand up to 200 cycles

Card 1/2

SKRAMTAYEV, B., professor; SUBENKIN, P., dotsent.

Cements used in construction. Stroitel' 2 no.3:26 Mr '56.
(Cement) (MLRA 9:12)

SKRAMTAYEV, B.; BUDILOV, A., dotsent, kandidat tekhnicheskikh nauk.

Quick-hardening and high-strength concretes made of stiff concrete mixtures. Stroitel' 2 no.7:25 J1 '56. (MLRA 10:1)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR. (for Skramtayev).

(Concrete)

SKRAMTAYEV, B. G.

USSR/Chemical Technology. Chemical Products and Their Application -- Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5330

Author: Skramtayev, B. G.

Institution: None

Title: Coarsely Porous Concrete in Foreign Countries

Original

Publication: Beton i zhelezobeton, 1956, No 7, 253-258

Abstract: Considerable use of coarsely porous concrete (CPC) in Western Europe is noted. Monolithic CPC is mostly utilized as wall material in construction of dwellings, industrial, administrative and public buildings; in France there are also manufactured 1-room size wall panels from CPC. In Holland the firm "Atlas" manufactures CPC blocks using a single fraction crushed stone (5-10 mm) of natural or slag pumice, porous clay filler, fuel slag or brick scrap. Compression strength of the concrete is as high as 80 kg/cm². The blocks are produced on a power driven vibrator machine with an output capacity of up to 2,800 blocks per shift. The use of CPC in many-storied buildings is noted.

Card 1/1

SKRAMTAYEV, B.G.; SMIRNOVA, I.A., inzhener.

Producing reinforced concrete railroad ties in England. Transp. stroi.
6 no. 10:27-29 O '56. (MIRA 10:1)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR
(for Skramtayev).
(Great Britain--Railroads--Ties, Concrete)

SKRAMAEV, B.

"Cold" concrete casting; a success of Soviet technology p. 1
New method of baking bricks. p. 2

CONSTRUCTORUL, Bucuresti, Vol 7, No. 316, Feb, 1956

SO: East European Accessions List (EEAL) Library of Congress, Vol 5, No. 7, July, 1956

SKRAMTAYEV, B.G., doktor tekhnicheskikh nauk, professor; SOROKER, V.I.,
doktor tekhnicheskikh nauk.

Prospects for the use of high-strength stiff concretes. Bet.
i zhel.-bet. no.12:417-421 D '56. (MLRA 10:2)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR
(for Skramtayev). (Concrete)

SKRAMTAYEV, B.G., professor; SHUBENKIN, P.F., dotsent.

Investigation of the strength of stiff concrete subjected to bending.
Avt.dor. 19 no.8:14-15 Ag '56. (MLBA 9:10)
(Concrete--Testing)

Technology -- Chemical Products and Their Application. Silicates.
TAG

USSR/Chemical Technology -- Chemical Products and Their Application. Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1681

Abstract: cement ground to a greater fineness. The specific surface of RC produced in the UK and other countries usually is 4,000-4,500 cm²/gm. Marked differences between the compressive strength of RC and that of normal portland cement are observed only during the early stages of hardening; after 28 days the difference is small, and after 3 months and more it disappears. The compressive strength of English RC after 3 days is 28% of the value after 28 days. The strength specifications are most rigid: the strength of samples prepared from a suspension of plastic consistency after one day must be ≤ 150 kg/cm² and after 3 days, 325 kg/cm². These figures must be multiplied by a factor of 1.7 to conform to standard USSR test methods. Argillaceous cements are produced in very small quantities and in some countries their production is not practiced.

Card 2/2

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk.

Reinforced concrete poles and columns. Gor.khoz.Mosk.30 no.6:36-37
Je '56. (Electric lines--Poles) (MIRA 9:9)

SKRAMTAYEV, B.G.

Math Determination of 24-hour strength of concrete made with rapid-setting cements. B. G. Skramtayev, G. I. Gorchakov, and A. M. Tarasenko. Soviet-Prom. 34, No. 8, 31-2 (1956).—Statistical study of 60 series of concrete samples made with 35 different portland cements gave the 24-hour strength of concrete R as: $R = 0.42R_1 (C/W - 1.29)$ for concretes normally aged and as $R' = 0.33R_1' (C/W - 0.3)$ for concretes steamed at 60° following the 2 + 6 + 2 = 10 hours schedule. In these expressions, R_1 and R_1' are crushing strengths of standard 3:1 sand-cement cubes after hardening for 24 hrs. in a water bath and after steaming at 60° following the 2 + 6 + 2 = 10 hours schedule; C/W is cement-water ratio. In the use of this expression a coeff. of correlation of 0.91-0.96 was recorded. I. D. Gut.

LFH

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk, redaktor;
SKVORTSOVA, I.P., redaktor izdatel'stva; MEL'NICHENKO, F.P.,
tekhnicheskii redaktor

[Concrete with increased additions of chlorides in winter conditions]
Beton s povyshennymi dobavkami khloristykh soli v zimnikh usloviyakh.
Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekt. 1957. 111 p. (MLHA 10:10)

1. Nauchno-tekhnicheskoye obshchestvo stroitel'noy promyshlennosti
SSSR. 2. Deyatel'nyy chlen Akademii stroitel'stva i arkhitektury
SSSR (for Skramtayev)
(Concrete--Cold weather conditions)

VITKUP, Abram Borisovich, kandidat tekhnicheskikh nauk; SKRAMTAYEV, B.G.,
redator; GORCHAKOV, G.I., nauchnyy redaktor; KUYBYSHEVA, G.V.,
redaktor; GILSON, P.G., tekhnicheskiiy redaktor.

[Effect methods of steam-curing concrete] Effektivnye rezhimy
teplovlazhnostnoi obrabotki betonov. Pod red.B.G.Skrantaeva.
Moskva, Gos.izd-vo lit-ry po stroit.materialam, 1957. 119 p.

(MIRA 10:11)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR
(for Skramtayev).

(Precast concrete)

SKRAMTAYEV, B.G.

28-1-19/42

AUTHOR: Skramtayev, B.G., Regular Member of the Academy of Building and Architecture of the USSR, and Gorchakov, G.I., Malinin, Yu.S., Candidates of Technical Sciences

TITLE: Inadequacies in Cement Standards (Nedostatki v standartizatsii tsementov)

PERIODICAL: Standartizatsiya, # 1, Jan-Feb 1957, p 61-64 (USSR)

ABSTRACT: The article represents a critical review of current USSR standards for cement. Standardization of cement and cement testing methods lags behind the growing production of pre-fabricated reinforced concrete, and a revision is overdue. There is only one standard for the most extensively used grade, Portland cement (including some grades like the Puzzolan and the slag-Portland, irrespective of composition and intended service) and several standards for special cements as the white or the alumina cement. The cements are not subdivided by composition and service conditions, as it is done in other countries. The quality is evaluated by many factors: by obsolete test methods and equipment and by compression and tension tests lasting for 3, 7, and 28 days. Gosstroy and the Ministry for Building Materials stubbornly retain

Card 1/4

Inadequacies in Cement Standards

28-1-19/42

the obsolete methods, although improved methods were developed long ago by special institutions (NIItsement, Giprotsement, and others). The inadequacies of the practiced tests are mentioned: the proportion of water is less than used in actual production; samples are prepared by forced stamping, while in practice plastic concrete mixtures are compacted almost exclusively by vibration, and hard mixtures are compacted by vibration under load. The shape of strength test samples (8-shaped) causes high local stresses. (At this point, comparison is made with the German standard method of testing, which is called practical). The so-called normal (Vol'sk) sand used for cement tests is one-fractional, with 0.50 - 0.80 mm grains, causes high porosity of samples and reduces their strength. (Comparison is made with sand used in France, Germany, USA, and included in the international standard project). Normal density and setting time is being determined without sand, whereas in practice it is never done this way. Testing by needle and pestle immersion is long obsolete and gives no accurate data, while there are modern methods and devices to measure the viscosity and the shift resistance of sand-cement solution, and not of cement dough. The strainer used for evaluation of grain size has coarse mesh through which 85-95 % of the mass gets through, so that the

Card 2/4

Inadequacies in Cement Standards

28-1-19/42

actual grain size cannot be known. Deryagin's method - described in an edition of the Academy of Sciences, 1953, is mentioned, a device for the measuring of air permeability, which differs from the method used abroad and from the Russian Tovarov method and enables closer evaluation of specific surface. Shrinkage and expansion of Portland cement is not measured in tests; only the presence or the absence of visual cracks on test cakes has to be stated, as is required by the standard. This does not represent the actual service conditions for cement. The authors give recommendations for new standards in which the following devices and methods are mentioned: a small vibration table (shown in illustration); two short-time methods of evaluation of cement grade, involving steam treatment of samples; a device for measuring grain sizes (an adaptation of Deryagin's device by NIIItsement); a simple device for evaluation of normal density and setting of cement (shown by an illustration). The American shrinkage measuring method (Carlson) is recommended. It is stated that cement standards have to be revised in 1-2 years.

Card 3/4

Inadequacies in Cement Standards

28-1-19/42

ASSOCIATIONS: Akademiya stroitel'stva i arkhitektury; VIA im. Kuybysheva;
Inzhenerno-stroitel'nyy institut im. Kuybysheva; NIItsement

AVAILABLE: Library of Congress

Card 4/4

5/11/11-14 N '57
ROYAK, S., kand.tekhn.nauk; SKRAMTAYEV, B., doktor tekhn.nauk.

Properties and quality of slag portland cement. Stroi.mat.
3 no.11:11-14 N '57. (MIRA 10:12)
(Slag cement) (Portland cement)

SKRAMTAYEV, B.G., doktor tekhnicheskikh nauk, prof.; AVAKOV, A.I.,
doktor tekhn, nauk.

Second International Congress on precast reinforced concrete
construction held in Dresden. Bet. i zhel. -bet. no.8:336-337
Ag '57. (MIRA 10:10)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR
(for Skramtayevev)
(Dresden--Precast concrete construction--Congresses)

97-10-13/14

AUTHORS: Skrantayev, B.G., Mikhaylov, V. V. (Members of the Academy for Building & Architecture of the USSR).

TITLE: International Conference on Prestressed Reinforced Concrete (Vsemirnaya konferentsiya po predvaritel'no napryazhennomu zhelezobetonu).

PERIODICAL: Beton i Zhelezobeton, 1957, Nr.10. pp.417. (USSR).

ABSTRACT: Report on the above-mentioned Conference which took place in San Francisco, U.S.A. from 29th July, 1957 to 2nd August, 1957.

AVAILABLE: Library of Congress.

1. Reinforced concrete

Card 1/1

AUTHOR: Skramtayeve, B.G., Professor, Dr., Member of the Academy of Building and Architecture of USSR. SOV /97-57-11-6/10

TITLE: Advancements and Aims in the Technology of Concrete. (Dostizheniya i perspektivy v oblasti tekhnologii betona).

PERIODICAL: Beton i Zhelezobeton, 1957, Nr 11, pp 452-455.

ABSTRACT: An historical survey in the development and usage of concrete since the first world war and a survey of present-day developments are given. Since the revolution achievements have been as follows: The construction of large mechanized stone crushing and ballast washing and sorting plants; the automation of factories producing precast concrete building units: the manufacture of large panels, blocks, whole slabs and prestressed concrete constructions. Considerable progress has been made in the method of concreting in the winter. Modern requirements need a new type of stone crushing machine which would give more cube-like shaped stones. Quick hardening and high-strength Portland cement production is rapidly increasing but due to the shortage of these cements the industries have to take up the regrinding of ordinary cements in vibro-grinders to increase the 'activity', i.e. the quality of the cement.

Card 1/2

Advancements and Aims in the Technology of Concrete. ^{SOV} /97-57-11-6/10

in order to alleviate the above-mentioned shortage. Additives of 20% of sand, lime and slug are included also to improve the quality of the cement. When the products from such improved cement are steamed cured, up to 50% of cement can be saved. Considerable attention is paid to light aggregates, e.g. Keramzit, burned clay, Termozit, Perlit and Vermiculite. In addition use of natural light aggregates like Pumice and Tuff are encouraged. An increase in the output of aerated concrete products has been noticeable but it has been found that this type of concrete does not lend itself so readily to processing as concretes made from light aggregates. The following scientists specialize in the technology of concrete: Professor N.M. Belyaev and scientists I.P. Aleksandrין and A.V. Sataikin. Professor Belyaev published a book under the title of "The Method of Preparation of Concrete Mixes" in 1927 and I.P. Aleksandrין published one entitled "Control in the Quality of Concrete". These two books have been standard hand-books on concrete mixes. The NIIZhB of the VNIIZhelezobeton is engaged on programmes of manufacture of large blocks and panels made from cellular concrete.

1. Concrete--Development
2. Concrete--Applications

Card 2/2

SKRAMTAYEV, B.G., professor, doktor tekhnicheskikh nauk; SHUBENKIN, P.F.,
dotsent, kandidat tekhnicheskikh nauk; BUDILOV, A.A., dotsent,
kandidat tekhnicheskikh nauk.

New method for determining tensile strenght of concrete. Stroi.
prom. 35 no.3:37-40 Mr '57. (MLRA 10:4)
(Concrete--Testing)

SKRAMTAYEV, S.G.

BARANOV, N.V., red.; GALKIN, Ya.G., red.; KUZNETSOV, G.F., red.; OVSYANKIN, V.I., red.; POPOV, A.N., red.; RUBANENKO, B.R., red.; SKRAMTAYEV, B.G., red.; GERASIMOVA, G.S., red. izd-va; EL'KINA, E.M., tekhn. red.

[Proceedings of the second session of the Academy of Construction and Architecture of the U.S.S.R. on problems of housing construction] Trudy II sessii Akademii stroitel'stva i arkhitektury SSSR po yoprosam zhilishchnogo stroitel'stva, 15-20 maia 1957. g. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 725 p. (MIRA 11:5)

1. Akademiya stroitel'stva i arkhitektury SSSR.
(Housing)

SKRAMTAYEV, B.G.
 BARANOV, H.V., red.; BURGMAN, V.V., red.; BURMNIN, V.A., red.; BYLINKIN, N.P., red.; GALKIN, Ya.G., red.; GRIGOR'YEV, O.V., red.; OVSYANKIN, V.I., red.; SKRAMTAYEV, B.G., red.; STRELETSKIY, N.S., red.; YARALOV, Yu.S., red.; BARS KOV, I.M., spetsial'nyy red.; FRIDBERG, G.V., inzh., red. izd-va.

[Construction in the U.S.S.R., 1917—1957; proceedings of the third session of the Academy of Construction and Architecture of the U.S.S.R. commemorating the 40th anniversary of the Great October Socialist Revolution] Stroitel'stvo v SSSR, 1917-1957; trudy III sessii Akademii stroitel'stva i arkhitektury SSSR, posviashchennoi 40-i godovshchine Velikoi Oktiabr'skoi sotsialisticheskoi revoliutsii. Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1958. 750 p. (MIRA 11:5)

1. Akademiya stroitel'stva i arkhitektury SSSR. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Baranov).
3. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR. (for Burgman, Bylinkin). 4. Chlen-korrespondent Akademii nauk SSSR i deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Streletskiy)

(Construction industry) (Architecture)

SKRAMTAYEV, B.G.

28-58-1-8/34

AUTHORS: Skramtayev, B.G., Doctor of Technical Sciences, Shubenkin,
P.F., Candidate of Technical Sciences, and Budilov, A.A.,
Candidate of Technical Sciences

TITLE: Standard Calculation Method for Concrete Mixtures (Yedinyy
metod rascheta sostava betona)

PERIODICAL: Standartizatsiya, 1958, # 1, pp 24-28 (USSR)

ABSTRACT: A standard calculation method for concrete mixtures does
not exist in the USSR, although the necessity of such method
was pointed out at the 4th All-Union Conference on the Pro-
blems of Concrete in 1948. At present, more than ten meth-
ods are in use and more have been suggested. All the form-
ulas suggested since the end of the last century and (in-
cluding the two formulas of Professor N.M. Belyayev and the
Swiss concrete specialist Bolomey (transliterated), now in
use), as well as the method recommended at the 1948 con-
ference, are briefly mentioned and criticized.

The authors suggest a calculation method that can be used
as a general standard. The method was developed during the
course of investigations made by the authors since 1950,
and consists of an introduction of new coefficients into

Card 1/2

Standard Calculation Method for Concrete Mixtures

28-58-1-8/34

previously used equations, along with two graphs.

There are 2 graphs and 2 tables.

AVAILABLE: Library of Congress

Card 2/2

SCV/97-4-5/11
AUTHOR: Mikhaylov, V.V.,)
Skravtsev, B.G.,) Members of ASIA of USSR.

TITLE: The Development of Prestressed Reinforced Concrete in
the USA and other foreign countries. (Razvitiye pred-
varitel'no napryazhennoye zhelezobeton v SShA i
drugikh zarubezhnykh stranakh).

PERIODICAL: Beton i Zhelezobeton, 1958 Nr 4. pp 143-155.

ABSTRACT: Examples of building methods and machinery, compiled
after a visit to the World Conference on prestressed
reinforced concrete held in San Francisco in June and
August 1957 are presented by the authors. There are
21 figures.

1. Reinforced concrete---Development

Card1/1

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their
Application. Ceramics. Glass. Binding Materials.
Concrete.

H-13

Abs Jour: Ref Zhur-Khin., No 2, 1959, 5580.

Author : Skrantayev, Boris Grigoriyevich.

Inst :

Title : Special Concretes in USSR.

Orig Pub: Stavebn. casop., 1958, 6, No 3, 131-137.

Abstract: Some light is thrown on the problems of technology of
manufacturing rapidly hardening concrete for preli-
minarily stressed constructions (activation of cement,
calculation of the composition of the concrete mix,
questions concerning the mechanization of thickening
of the concrete mix, speeding up of the hardening of
concrete, as well as some questions concerning re-

Card : 1/2

SKRAMTAYEV, B.G.

For a radical improvement in prefabricating concrete elements.
Bet. i zhel.-bet. no.6:201-205 Je '58. (MIRA 11:6)

1.Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR.
(Precast concrete)

PAYPER, Dzheyma [Piper, James],; SKRAMTAYEV, B.G., prof., red.; SHVETSOVA,
A.V., [translator]

Prestressed reinforced concrete in the United States. Bet. i zhel.
bet. no. 8:300-305 Ag '58. (MIRA 11:8)

1. Vitse-prezident Portland-tsementnoy assotsiatsii, Chikago, SShA.
(United States--Precast concrete construction)

SKRAMTAYEV, B.G., doktor tekhn. nauk, prof.; VYSOTEKIY, P.I., inzh.;
TSYGANKOV, I.I., inzh.

Industry manufacturing precast reinforced concrete and large
blocks in the German Democratic Republic. Biul. stroi. tekhn.
15 no. 7:32-35 J1 '58. (MIRA 11:7)
(Germany, East--Precast concrete)

SKRAMTAYEV, B.G., prof., doktor tekhn. nauk,; SHUBENKIN, P.F., kand. tekhn.
nauk,; BUDILOV, A.A., kand. tekhn. nauk

Addition of sand in cement grinding. Nov.tekh. i pered. op. v
stroi. 20 no. 7:19-21 J1 '58. (MIRA 11:8)
(Cement)
(Sand)

KHAYKIN, Ya.B.; SKRAMTAYEV, B.G., prof., doktor tekhn.nauk, red.;
KRUGLOV, S.A., red.izd-va; STEPANOVA, E.S., tekhn.red.;
OSENKO, L.M., tekhn.red.

[English-Russian dictionary on cement and concrete] Anglo-
russkii slovar' po tsementu i betonu. Pod red. B.G.Skrantaeva.
Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.materia-
lam, 1959. 283 p. (MIRA 13:2)
(Cement--Dictionaries) (Concrete--Dictionaries)
(English language--Dictionaries--Russian)

15 (6)

SOV/101-59-1-7/10

AUTHORS: Skramtayev, B. G., and Bazhenov, Yu. M.

TITLE: The Average Quality of Portland Cement in Foreign Countries
(O srednem kachestve portland-tsementa za rubezhom)

PERIODICAL: Tsement, 1959, Nr 1, pp 25 - 27 (USSR)

ABSTRACT: The authors state that foreign literature contains very little information on the quality of cement. Various standard specifications note only minimum technical attributes. At the same time foreign industry produces material of a higher quality. The only actual method of stating the average quality of cement in West Germany is a calculation of the average compressive strength of concrete. In the USSR the "Bolomey" formula is used for such calculation.

$$R_u = \frac{R_5}{A \left[\frac{u}{B} - 0.50 \right]}$$

Card 1/2

SOV/101-59-1-7/10

The Average Quality of Portland Cement in Foreign Countries

(symbols not explained in the article)

The average strength of portland cement in kg/cm^2 is: in the USA 550/ kg/cm^2 , in England -480, West-Germany -470. In the USSR, in accordance with the plant's reports compiled in 1957 by the Nauchno issledovatel'skiy institut tsementa (Scientific Research Institute for Cement) the average strength was 455 kg/cm^2 . The authors conclude that in the USSR, the average strength of cement must be increased to attain a quality level equal to that in foreign countries. There are 4 tables and 1 graph.

Card 2/2

SKRAMTAYEV, B G.

SOV/87-89-1-10/18

AUTHOR: Pflaumer, O.B., Candidate of Technical Sciences

TITLE: Definition of Strength of Concrete in Tension Using Compressed Cylindrical Testing Samples (Opredeleniye na szhimsyenykh tsilindricheskikh obraztsakh prochnosti betona pri rastyaznenii)

PERIODICAL: Beton i Zhelezobeton, 1989, Nr 1, pp 35-36 (USSR)

ABSTRACT: The strength of concrete during tensioning can be obtained with satisfactory accuracy using cylindrical testing samples of 15 mm diameter and 30 cm length, loaded longitudinally (as illustrated in Fig.2), and 15 mm wide and 5 mm thick pads. In a similar way the strength of natural stones during elongation can be defined, but in this case the cylindrical stone samples have a diameter of 5 cm. The method described has many advantages, and standardization is advocated. Fig.1 gives the types and sizes of various non-standardized testing samples as used at present for definition of the strength of concrete during tensioning. In 1947 F. Carneiro (Brazil) devised a new method of testing the strength of concrete in Card 1/3 tension, which considerably reduces the shortcomings of

SOV/97-59-1-10/18

' Definition of Strength of Concrete in Tension Using Compressed
Cylindrical Testing Samples

existing methods. This new method is based on the Hertz principle of distribution of stresses in a thin circular disk compressed on the perimeter by two forces (see Fig.3). Fig.4 shows characteristics of the distribution of tensions in a cylinder. Various tests have been carried out in Russia (A.D. Osipov: "Definition of the limit of strength of concrete at compression", published in *Gidrotekhnicheskoye stroitel'stvo* 1956, Nr 8; and B.G. Skramtayev, P.F. Shubenkin and A.A. Budilov: "New method for the definition of strength of concrete during tensioning" in *Stroitel'naya promyshlennost'*, 1958, Nr 3) and abroad. Tests carried out both in England and by the Institute for Building Materials ASIA SSSR are described in detail. Fig.5 shows cylindrical samples undergoing actual tests. Fig.6 shows graphs of the relationship between the strength of concrete during compression and tension carried out according to NiTU-123-55. In 1957 the Institute of Building Materials carried out three comparative tests to establish the strengths of various marks of concrete during tensioning, using (a) tensioned Card 2/3 rectangular samples, (b) bent rectangular samples,

SOV/97-59-1-10/18

. Definition of Strength of Concrete in Tension Using Compressed
Cylindrical Testing Samples

and (c) cylindrical samples. The composition of concrete mixes, the time of hardening, the strength of the concrete samples at the time of testing, and the strength in compression, are tabulated. Before the mechanical tests, the homogeneity of the concrete of all samples was tested by means of ultrasound. Both foreign and Russian tests prove the worth of the method of defining the strength of concrete during tensioning shown in Fig.2. There are 6 figures and 1 table.

Card 3/3

SKRAMTAYEV, B., prof.

What's new in the technology of concrete. Stroitel' no.3:28-29
Mr '59. (MIRA 12:6)

(Concrete)

SKRAMTAYEV, B.G.; BAZHENOV, Yu.M., inzh.

Unified experimental rating method for determining mixes of ordinary
(heavy) concretes. Izv.ASiA no.4:57-72 '59. (MIRA 13:6)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR.
(Concrete)

SKRAMTAYEV, B., prof., doktor tekhn.nauk; BUZHEVICH, G., kand.tekhn.
nauk

Coarse porous concrete. Stroitel' no.11:23,29 N '59.
(MIRA 13:3)
(Lightweight concrete)

OVSYANKIN, V.I., otv.red.; BELYAKOV, A.A., red.; BYLINKIN, N.P., red.;
VLASOV, A.V., red.; GALKIN, Ya.G., red.; LIFATOV, A.P., red.;
RUBANENKO, B.R., red.; SKRAMTAYEV, B.G., red.; CHERNOV, T.P.,
red.; KHOLIN, N.A., red.; UDOD, V.Ya., red.izd-vo; GILSON, P.G., tekhn.red.

[Proceedings of the 5th session of the Academy of Construction and Architecture on problems in introducing industrial building methods, 17-19 December 1959] Trudy V sessii Akademii stroitel'stva i arkhitektury SSSR po voprosam industrializatsii stroitel'stva, 17-19 dekabria 1959 g. Moskva, Gos.izd-vo lit-ry po stroit., arkh. i stroit.materialam, 1960. 743 p.

(MIRA 13:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. 2. Deystvitel'nyye chleny Akademii stroitel'stva i arkhitektury SSSR (for Ovsyankin, Belyakov, Vlasov, Lifatov, Rubanenko, Skramtayev, Chernov, Kholin).

(Precast concrete construction)

SKRAMTAYEV, B.G.

New building materials and details for building cities using
industrial methods. Izv. ASiA no. 3:69-71 '60. (MIRA 13:12)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury
SSSR.
(Building materials) (Precast concrete construction)

SKRAMTAYEV, B.G., doktor tekhn.nauk, prof.; GEMMERLING, G.V., kand.geol.-
min.nauk; DOMNICH, A.I., aspirant

Coarse porous concrete made with waste blast-furnace slags. Bet.
i shel.-bet. no.10;439-442 0 '60. (MIRA 13:10)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury
SSSR (for Skramtayev).

(Concrete) (Slag)

SKRAMAYEV, B., prof., doktor tekhn.nauk

How to make -recast concrete well rings in villages. Sil'.
bud. 10 no.2:13-15 F '60. (MIRA 13:5)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury
SSSR.

(Wells)

• SKRAMTAYEV, B.G., prof., doktor tekhn.nauk

Shortcomings in designing and constructing reinforced-concrete tanks
for petroleum products. Prom. stroi. 38 no.10:50-51 '60.
(MIRA 13:9)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury.
(Tanks) (Precast concrete construction)

BLOKH, G.S., kand. tekhn. nauk; CHERNYAK, Ya.N., kand. tekhn. nauk;
BALKEVICH, V.L., kand. tekhn. nauk; GAK, B.N., kand. tekhn.
nauk; KORDONSKAYA, R.K., kand. tekhn. nauk; REMPEL', A.M.,
kand. tekhn. nauk; ZHUKOV, D.V., nauchnyy red.; YUSHKEVICH,
M.O., red. toma; SKRAMTAYEV, B.G., glav. red.; BALAT'YEV,
P.K., red.; KITAYEV, Ye.N., red.; KITAYGORODSKIY, I.I., red.;
KRZHEMINSKIY, S.A., red.; ROKHVARGER, Ye.L., red.; KHOLIN, I.I.,
red.; GURVICH, E.A., red. izd-va; SHERSTNEVA, N.V., tekhn. red.

[Handbook on the manufacture of structural ceramics] Spra-
vochnik po proizvodstvu stroitel'noi keramiki. Moskva, Gos.
izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam.
Vol.1. [General information and production control] Obshchie
svedeniia i kontrol' proizvodstva. Pod red. M.O. Iushkevicha.
1961. 464 p. (MIRA 15:2)
(Ceramics) (Building materials)

SKRAMTAYEV, B.G.; LESHCHINSKIY, M.Yu., kand.tekhn.nauk

Nondestructive method of determining the strength of concrete.
Izv. ASiA no.1:48-55 '61. (MIRA 14:7)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury.
(Concrete---Testing)

S/812/61/000/005/002/005

AUTHORS: Skramtayev, B.G., Doctor of Technical Sciences, Shchepetov, A.M.,
Candidate of Technical Sciences, Isakovich, G.A., Engineer.

TITLE: Light-weight macroporous synthetic-resin concrete.

SOURCE: Akademiya stroitel'stva i arkhitektury SSSR. Institut novykh
stroitel'nykh materialov. Sbornik trudov. no.5. 1961. Novyye
stroitel'nyye polimernyye materialy. pp. 38-47.

TEXT: The paper reports the results of experimental work on macroporous (MP) concrete that serves as the heat-insulating layer in wall panels. The senior author had previously shown that, regardless of the presence of large-diameter open pores, the thermal conductivity of such material is primarily determined by the weight per unit volume of the material, which renders grain size, degree of compaction, etc., as such, insignificant as thermal-conductivity parameters. The substantial air-permeability of MP concrete renders plastering on both sides necessary. Thus, a reduction in weight of MP concrete through the use of light-weight fillers and highly adhesive binders permits the making of thermally highly insulating concretes with relatively good strength properties. This can be achieved with thermosetting (TS) synthetic resins (SR), but at a high cost. Hence, concretes with

Card 1/5

Light-weight macroporous synthetic-resin concrete. S/812/61/000/005/002/005

minimal quantities of SR only can be given consideration. This requirement is met largely by the MP "keramzit" (porous-clay-filler) concrete developed by the authors, in which kernels of keramzit gravel are bound by TS SR; the gravel has a small specific surface area of 4-15 cm²/g and a low weight per unit volume (300-450 kg/m³), both of which render it economical in its use of resin binder and effective as an insulating building material. Other light-weight fillers (listed) have greater specific surface areas and, hence, tie up greater quantities of costly binder. Among the SR, the phenol-formaldehydes (PF) are most suitable for water- and atmospheric-action resistance and mechanical properties. The present tests were made on HCM-11 (NSM-11) resin, developed by the new-building-materials lab of Glavmosoblstroymaterialov (Main Moscow Oblast Administration of Building Materials) and the experimental factory of the April Plant. Initial material: Cyclohexanol (C₆H₁₁OH) obtained by electrolytic hydration of phenol (C₆H₅OH). Characteristics of NSM-11: spec. grav. 1.13-1.15 g/cm³, viscosity 6-10 centipoises, free-phenol content 6-7%, dry residue 58.6-61.4%. The unit consumption of SR is governed primarily by the filler-grain size and the required binder-film thickness, which, in turn, depends on the viscosity and the physico-mechanical properties of the SR. The viscosity of the SR should not be so low that it can run off the grains of the filler during forming and heat treatment, neither should it be so high that it could prevent the formation of a good contact because of excessive surface tension.

Card 2/5

Light-weight macroporous synthetic-resin concrete. S/512/61/000/005/002/005

The optimal thickness as determined experimentally is 0.15-0.25 mm. An empirical equation is provided for the amount of commercial resin per m^3 of concrete in terms of the uncompacted (freely poured) and the solid weight of filler per unit weight, the thickness of the binder film, the specific gravity of the resin, and the mean filler-grain radius. A formula is provided for the latter in terms of the percentual content in the filler mix of grains of a given fraction and the retaining and the passing meshes which determine the size of the grains of the given fraction. A correction factor (as large as 50% in keramzit) must be added in the first formula to allow for the filling of the apertures on the surface of the filler. A finely comminuted addition to the resin increases the total binder volume and improves its retention on the grain surface, especially during the initial period of the heat treatment. Of the several admixtures tested, ground sand added in the amount of 50-100% of the resin weight was optimal. The particle size of the ground sand must not be greater than the size of the open pores on the filler surface, since otherwise the particles remain on the surface of the "keramzit," whereas the SR flows into the pores, so that the SR consumption is increased and the strength of the concrete is reduced. The preparation of the keramzit-plastic-concrete is described. Requirements governing the selection of the resin hardener (if any is required) are discussed. In PF SR, in which setting is accomplished without hardeners by heating alone, the porosity produced by water-vapor formation requires that heating proceed

Card 3/5

Light-weight macroporous synthetic-resin concrete. S/812/61/000/005/002/005

at a slow rate and not exceed a $T\ 15-20^{\circ}$ below that at which significant amounts of water vapor are emitted. Addition of formaldehyde and organic acids will accelerate hardening of PF resins; the hardening pH must be of the order of 5.5-6.5. The process of mixing of the resin with hardener and finely-ground mineral additive is described, followed by specifications for the sucking of the heat carrier through the porous concrete material to accelerate the heat-curing process within the highly heat-insulating material. In view of the relatively small mechanical strength of the filler, the strength of the concrete as a whole depends but little on the amount of SR in it (beyond a prescribed minimum of SR required for effective bonding). Compression tests showed failure within the keramzit grains, not at their mutual points of contact. Hence, any further addition of bonding SR would be futile. The weight per unit volume of MP keramzit concrete depends primarily on the weight of the keramzit filler and only insignificantly on that of the binder. The low weight per unit volume and relatively high strength of MP keramzit concrete renders it suitable for use as a heat-insulating material in multi-layered panel constructions and, because of its low resin consumption and low cost, affords competition as an intermediate rigid heat-insulating material for installation directly inside the outer reinforced-concrete structure layer and as a support for interior plastering. In low buildings the MP keramzit concrete can also serve for selfsupporting walls and in framework buildings for filler walls. There are 5 figures, 3 tables, and

Card 4/5

Light-weight macroporous synthetic-resin concrete. S/812/61/000/005/002/005

4 references (3 Russian-language Soviet and 1 French by Lévy, Un matériel commode et économique, le béton caverneux. "Bâtir," no.35, Nov.1953, 3-9.

ASSOCIATION: None given.

Card 5/5

SKRAMTAYEV, B.; SOROKER, V., prof.

Ways to save on cement at reinforced concrete article plants.
Na stroi. Ros. no.6:30-32 Je '61. (MIRA 14:7)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury
SSSR (for Skramtayev).
(Cement) (Reinforced concrete)

MIKHAYLOV, V.V., doktor tekhn.nauk, prof.; SKRAMTAYEV, B.G., doktor tekhn.
nauk, prof.

Prestressed concrete in the U.S.A. Bet.i zhel.-bet no.6:280-285
Je '61. (MIRA 14:7)
(United States--Prestressed concrete)

SKRAMTAYEV, B.G., prof., doktor tekhn.nauk; BAZHENOV, Yu.M., inzh.

Investigation of the vibration method of mixing concrete. Trudy
NII ZHB no.21:5-16 '61. (MIRA 14:12)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR
(for Skramtayev). 2. Voenno-inzhenernaya akademiya imeni V. V.
Kuybysheva (for Bazhenov).

(Vibrated concrete)

CHUCHENKO, Stefan Petrovich; SKRAMTAYEV, B.G., prof., doktor tekhn. nauk, retsenzent; BUTT, Yu.M., prof., doktor tekhn. nauk, retsenzent; BOGDANOV, N.S., prof., doktor tekhn. nauk, retsenzent; SAAK'YAN, Yu.A., red.; BOROVINSKAYA, L.M., tekhn. red.

[Reinforced concrete without thermal treatment] Zhelezobeton bez teplovoi obrabotki. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1962. 93 p. (MIRA 16:3)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Skramtayev). 2. Moskovskiy khimiko-tekhnologicheskii institut (for Butt).

(Precast concrete)

BUZHEVICH, G.A., kand.tekhn.nauk; SKRAMBAYEV, B.G., prof., red.;
CHERKINSKAYA, R.L., red.izd-va, SHERSTNEVA, N.V., tekhn.red.

[Studies of coarse-pored concrete based on porous aggregates]
Issledovaniia po krupnoporistomu betony na poristykh zapolniteliakh.
Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam,
1962. 129 p. (Akademiia stroitel'stva i arkhitektury SSSR.
Institut betona i zhelezobetona, Perovo, no.12). (MIRA 15:8)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury
SSSR (for Skramtayev).

(Lightweight concrete)

SARKHANI H Y L V, B. C.

SHRAMIYEV, B.G., prof., doktor tekhn.nauk

New problems in determining the strength of concrete. Bet.1
zhel.-bet. 8 no.9:385-388 S '62. (MIRA 15:12)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury
SSSR.

(Concrete--Testing)

SKRAMTAYEV, B.G., prof., doktor tekhn.nauk; FRENKEL', I.M., kand.tekhn.nauk

"Concrete and concrete work" by N.A. Zhitkevich. Bet. i
zhel.-bet. 8 no.12:571-572 D '62. (MIRA 16:2)

1. Deystvitel'nyy chlen Akademii stroitel'stva i
arkhitektury SSSR (for Skramtayev).

(Concrete)
(Concrete construction)

SKRAMTAYEV, B. G.; ROYAK, S. M.

Standardization of cement. Standartizatsia 26 no.10:29-32
0 '62. (MIRA 15:10)

(Cement—Standards)

ANASTASIADI, A.P.; BOROVSKIY, V.R.; VYBORNOV, G.V.; KOPELYANSKIY,
G.D.; MAK, I.L.; PECHURO, S.S.; PIYEVSKIY, I.M.;
RACHEVSKAYA, K.D.; REYZNER, Yu.B.; RYBAK, L.L.; TSEPELIOVICH,
M.R.; SHUMAKHER, L.I.; YUSHKEVICH, M.O.[deceased]; AGEYENKO,
Yu.G., nauchnyy red.; BELUGIN, A.T., nauchnyy red.; KOGAN,
G.S., nauchnyy red.; KRZHEMINSKIY, S.A., nauchnyy red.;
MITSKEVICH, M.I., nauchnyy red.; SILENOK, S.G., nauchnyy red.;
TRILESNIK, Z.Ye., nauchnyy red.; ZUBAREV, K.A., glav. red.;
PROFIMOV, I.P., red.; SKRAMTAYEV, B.G., glav. red.; BALAT'YEV,
P.K., red.; KITAYEV, Ye.N., red.; KITAYGORODSKIY, I.I., red.;
ROKHVARGER, Ye.L., red.; KHOLIN, I.I., red.; CHERKINSKAYA,
R.L., red.; RODIONOVA, V.M., tekhn. red.

[Manual on the production of gypsum and gypsum products] Spravochnik po proizvodstvu gipsa i gipsovykh izdelii. [By] A.P. Anastasiadi i dr. Pod red. K.A.Zubareva. Moskva, Gosstroizdat, 1963. 464 p. (MIRA 16:7)

(Gypsum) (Gypsum products)

SKRAMTAYEV, B.G., prof., doktor tekhn.nauk; YAKUB, I.A., kand.tekhn.nauk;
KOROLEVA, A.T., inzh.

Waterproof and acidproof silicate materials. Stroi.mat. 9 no.12:
31-32 D '63. (MIRA 17:3)

SKRAMTAYEV, B.G., doktor tekhn.nauk, prof.

New type of large box-shaped prestressed slabs. Bet.i zhel.-bet. 9 no.12:
566-568 D '63. (MIRA 17:2)

SKRABAYEV, Boris Grigor'iyevich, doktor tekhn. nauk, prof.;
LESHCHINSKIY, Marat Yur'yevich, kand. tekhn. nauk;
KUZNETSOVA, M.N., red.

[Testing the strength of concrete in samples, products,
and buildings] Ispytanie prochnosti betona v obraztsakh,
izdeliyakh i sooruzheniyakh. Moskva, Stroizdat, 1964.
175 p. (MIRA 17:12)

CHILAMIDAYEV, B.G., prof., doktor tekhn. nauk

Urgent problems of the chemicalization of production.

Strel. mat. 12 no.13-6 Ja'64.

(MIRA 17:5)

1. Zamestitel' nachal'nika Upravleniya nauchno-
issledovatel'skikh rabot Gosstroya SSSR.

SKRAMTAYEV, B.G., doktor tekhn. nauk, prof., red.; PERFILOV, I.F.,
inzh., red.

[Method of testing concrete models for compression] Meto-
dika ispytaniia betonnykh obraztsov na szhatie. Moskva,
Gosstroizdat, 1963. 48 p. (MIRA 17:10)

1. Moscow. Nauchno-issledovatel'skiy institut organizatsii,
mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.

SKRAMTAYEV, B.G., doktor tekhn. nauk prof.; ROYAK, S.M., prof.; CHERKASOVA, A.F.
kand. tekhn. nauk; TARASENKO, A.M., inzh.

Relation of strength characteristics of cement and of concrete.
Trudy NIITsSement no.19:84-97 '63. (MIRA 17:11)

BARBARINA, T.M.; BUBYR', N.F.; BUTT, L.M.; VEL'SOVSKIY, V.N.;
GORLOV, Yu.P.; GRIBANOVSKIY, V.G.; DROZDOV, I.Ya.;
YEREMIN, I.A.; ZEZIN, V.G.; KEVESH, P.D.; KOCHANOV, E.P.;
KOSYREVA, Z.S.; LEVIN, S.N.; MAKENOVICH, A.T.; MERZLYAK,
A.N.; RODOV, E.S.; ROZHNOV, A.I.; SEREBRYANSKAYA, B.I.;
SUKHAREV, M.F.; USTENKO, A.A.; KHOMENKO, Z.S.; SHMIDT,
L.M.; ETIH, A.O.; YAKHONTOVA, N.Ye.; KITAYTSEV, Vladimir
Andreyevich, prof., doktor tekhn. nauk, red.; SKRAMTAYEV,
B.G., glav. red.; TROKHIMOVSKAYA, I.P., zam. glav. red.;
KRAVCHENKO, I.V., red.; KITAYGORODSKIY, I.I., red.;
KRZHEMINSKIY, S.A., red.; ROKHVARGER, Ye.L., red.; BALAT'YEV, P.K.
red.

[Manual on the manufacture of heat insulating and acous-
tical materials] Spravochnik po proizvodstvu teploizo-
liatsionnykh i akusticheskikh materialov. Moskva, Stroi-
izdat, 1964. 524 p. (MIRA 18:1)

L 44307-65 ENG(s)-2/EWT(m) Pw-4

ACCESSION NR: AP5009786

UR/0097/65/000/004/0025/0027

AUTHORS: Skrantavay, B. G. (Doctor of technical sciences, Professor); Bazhenov, Yu. M. (Candidate of technical sciences, Docent)

TITLE: Improved formulae for determining the strength of concrete 15

16
B

SOURCE: Beton i zhelezobeton, no. 4, 1965, 25-27

TOPIC TAGS: concrete, cement, material strength, concrete construction

ABSTRACT: Research conducted to clarify certain strength and other properties in concrete is described. The study was conducted in conjunction with the decision to adopt the new standards GOST 310-60 and GOST 10178-62. In all, 15 organizations took part in the large series of tests. It was noted that in the water-cement ratio interval 0.7-0.4 there is a linear relationship between concrete strength, cement activeness, and water-cement ratio. This relationship is expressed in the formula

$R_0 = AR_n \left(\frac{U}{B} - B \right)$. Each participating organization submitted its own evaluation of

the coefficients A and B above. The authors generalize the results as

$R_0 = 0.43R_n \left(\frac{U}{B} - 0.5 \right)$; $R_0 = 0.56R_n \left(\frac{U}{B} - 0.5 \right)$, for cement investigated according to

Card 1/2

I 44307-65

ACCESSION NR: AP5009786

standards GOST 310-41 and GOST 310-60, respectively. Statistical methods used to evaluate deviations and maximum error values are explained. In the water-cement ratio range of 0.3 to 0.4 the equations $R_0 = 0.29 R_u^* \left(\frac{H}{B} + 0.36 \right)$; $R_0 = 0.36 R_u^* \left(\frac{H}{B} + 0.53 \right)$

apply for GOST 310-41 and GOST 310-60 respectively. Maximum error in this case is about 1-3%. Additional formulae are given for relating strength to values of cement activeness coefficient. Orig. art. has: 9 equations and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 001

OTHER: 000

Card 2/2 MB

GORCHAKOV, Grigoriy Ivanovich; KAPKIN, Mikhail Matveyevich;
SKRAMTAYEV, Boris Grigor'yevich; IVANOV, F.M., kand.
tekhn. nauk, retsenzent;

[Improving the frost resistance of concrete in elements
employed in industrial and hydraulic structures] Povyshe-
nie morozostoikosti betona v konstruktsiiakh promyshlennykh
i gidrotekhnicheskikh sooruzhenii. Moskva, Stroiizdat,
1965. 193 p. (MIRA 18:12)

SKRAMTAYEV, B.G., prof.; VYSOTSKAYA, N.P., inzh.

Swiss construction ceramics. Stroi. mat. 11 no. 12:35-36
D 165. (MIRA 18:12)

ACC NR: AP7012401

SOURCE CODE: UR/0097/67/000/001/0011/0013

AUTHOR: B. G. Skramtayev (Doctor of technical Sciences; Professor; Deceased);
B. D. Trinker (Candidate of technical Sciences)

ORG: none

TITLE: Increasing the service life of reinforced-concrete cooling towers

SOURCE: Beton i zhelezobeton, no. 1, 1967, 11-13

TOPIC TAGS: reinforced concrete, thermoelectric power plant

SUB CODE: 11,10

ABSTRACT: Citing Cooling Towers No 1 and No 2 at the thermal electric power station of the Novo-Lipetsk Metallurgical Plant as characteristic examples of reinforced-concrete cooling towers built in the USSR, the authors discuss the types of breakdown, weathering, and structural failures in these structures during the last several years. The main reasons for the failure of the towers is shown to be the high water-to-cement ratio and low density of the concrete, particularly in the joints. The bitumen protective coatings on the inside were also vulnerable to the penetration of moisture. The authors give recommended contents for active hydraulic additives and minerals in the clinker; they further recommend that gunite-concrete be used, and that the instructions SN 257-63 for constructing the towers be rewritten. [JPRS: 40,300]

Card 1/1

0932 1328

SKRAMTAYEV, N.A., kandidat tekhnicheskikh nauk.

New book on concrete technology ("Cement economy in road building."
F.M.Ivanov. Reviewed by B.G.Skramtaev). Avt.dor.18 no.7:30-31 N '55.
(Roads, Concrete) (Ivanov, F.M.) (MLRA 9:4)

SKRAMTAYEVA, G.I.; KIR'YANOV, A.P., glavnyy mekhanik

Laying insulated pipelines by the method of pushing. Gor.khoz.Mosk.
32 no.12:36-38 D '58. (MIRA 11:12)

1. Akademiya kommunal'nogo khozyaystva imeni K.D. Pamfilova (for
Skramtayeva). 2. Upravleniye "Mospodzemstroy" (for Kir'yanov).
(Pipelines)

SKRAMTAYEVA, G.A., inzh., ispolnyayushchiy obyazannosti starshego nauchnogo sotrudnika. Prinimali uchastiye: KIR'YANOV, A.P.; FINKEL'SHTEYN, Ya.B.; NOSOV, F.P.. STRIZHEVSKIY, V.I., kand.tekhn.nauk, nauchnyy red.; CHABROV, I.M., red.

[Method for applying cement coatings in insulating steel pipes to be used in trenchless and jacketless pipelaying; scientific report] Tekhnologiya naneseniya tsementnoi izolyatsii na stal'nye truby dlia bestransheinoi besfutiarnoi prokladki truboprovodov; nauchnoe soobshchenie. Moskva, Otdel nauchno-tekhn.informatsii Akad.koosmun. khoz., 1959. 18 p. (MIRA 13:6)

1. Glavnyy mekhanik Upravleniya po stroitel'stvu podzemnykh sooruzheniy Glavmosstroya (for Kir'yanov). 2. Nachal'nik Proizvodstvenno-tekhnicheskogo otdela (for Finkel'shteyn). 3. Glavnyy inzhener trubozagotovitel'nogo zavoda tresta "Mospodzemstroysnab" (for Nosov).
(Protective coatings) (Pipelines)

MELKA, Ya.; PEREGRIN, Ya. SKRANC, O. (Gradec Kralove, Czechoslovakia)

Action of soda bath according to O.B.Lepeshinskaia. Klin. med. 32
no.11:72-74 N '54. (MLRA 8:1)

1. Iz Instituta fiziologii Voenno-meditsinskoy akademii
(BALNEOLOGY
carbonated bath, physiol. eff.)
(SODIUM, ther. use
carbonated bath, physiol. eff.)

PEREGRIN, J.; SKRANC, O.; VESELY, C.; SVERAK, J.

Conditioned reflexes produced by the post-activation potentiation
in the activity of the human visual analyzer. Cesk.fysiol. 9 no.3:
255-256 My '60.

1. Fysiologicka katedra a očni klinika lek. fakulty KU, Hradec
Kralove.

(REFLEX CONDITIONED)
(VISION physiol)

SKRANC, O.

Changes in the higher nervous activity in dogs after a prolonged repetition of the stereotype. Cesk.fysiol. 9 no.3:269-270 My '60.

1. Fysiologicky ustav lek.fak. KU, Hradec Kralove.
(REFLEX CONDITIONED)

REHAK, Svatopluk; SKRANC, Oldrich

Determination of changes in the volume during the course of reactive hypertension in experimental animals. Sborn. ved. prac. lek. fak. Karlov. univ. (Hrad. Kral.) 4 no.2 suppl.:193-201 '61.

1. Katedra ocního lékařství; přednosta prof. MUDr. M. Klima Katedra fyziologie; přednosta prof. MUDr. J. Melka.

(INTRAOCULAR PRESSURE)